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United States  
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Agriculture

Soil  
Conservation  
Service

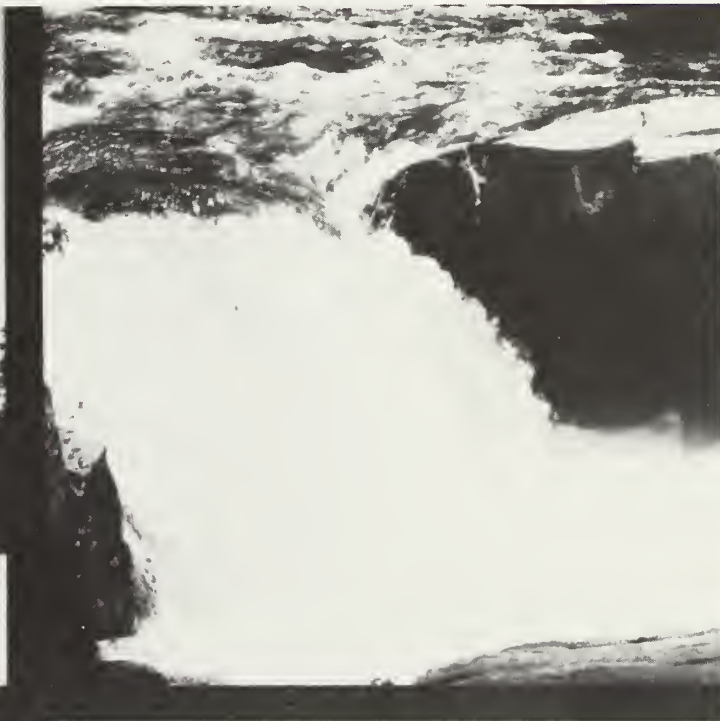
Boise,  
Idaho



# Idaho Water Supply Outlook

March 1, 1988

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# Foreword

## How Forecasts Are Made

Most of the annual streamflow in the Western United States originates as snowfall. This snowfall accumulates high in the mountains during winter and early spring. As the snowpack accumulates, hydrologists estimate the runoff that will occur when it melts. Predictions are based on careful measurements of snow water equivalent at selected index points. Precipitation, temperature, soil moisture and antecedent streamflow data are viewed in conjunction with snowpack data to prepare runoff forecasts. This report presents a comprehensive picture of water supply outlook conditions for areas dependent upon surface runoff. It includes selected streamflow forecasts, summarized snowpack and precipitation data, reservoir storage data and narratives describing current conditions.

Streamflow forecasts are cooperatively generated by Soil Conservation Service and National Weather Service hydrologists. Forecasts become more accurate as more data affecting runoff becomes known. For this reason, forecasts are issued that reflect three future precipitation conditions — Below Normal, Average, and Above Normal. These forecasts are terms reasonable minimum, most probable, and reasonable maximum. Actual streamflow can be expected to fall between the lower and upper forecast values eight out of ten years.

Snowpack data are obtained by using a combination of manual and automated measurement methods. Manual readings of snow depth and water equivalent are taken at locations called snow courses on a monthly or semi-monthly schedule during the winter. In addition, snow water equivalent, precipitation, temperature, and other parameters are monitored on a daily basis and transmitted via radio telemetry to central data collection facilities. Both monthly and daily data are used to project snowmelt runoff.

## For More Information

Copies of Monthly Water Supply Outlook Reports and other reports may be obtained from the states listed below. An annual snow survey data summary is published by the Soil Conservation Service for each of the western states. Historical snow survey data may be obtained at those same offices.

STATE	ADDRESS
Alaska	201 East 9th Ave., Suite 300, Anchorage, AK 99501-3687
Arizona	201 East Indianola, Suite 200, Phoenix, AZ 85012
Colorado	2490 West 26th Ave., Denver, CO 80211
New Mexico	517 Gold Ave. S.W., Room 3301, Albuquerque, NM 87102-3157
Idaho	304 North 8th Street, Room 345, Boise, ID 83702
Montana	10 East Babcock, Room 443, Federal Building, Bozeman, MT 59715
Nevada	1201 Terminal Way, Room 219, Reno, NV 89502
Oregon	1220 Southwest 3rd Ave., Room 1640, Portland, OR 97204
Utah	4402 Federal Building, 125 South State Street, Salt Lake City, UT 84147
Washington	360 U.S. Court House, Spokane, WA 99201-1080
Wyoming	Federal Building, 100 East "B" Street, Casper, WY 82601

In addition to state reports, a Water Supply Outlook for the Western United States is published by the Soil Conservation Service and National Weather Service monthly, January through May. Reports may be obtained from the Soil Conservation Service, West National Technical Center, 511 Northwest Broadway, Room 248, Portland, OR 97209.

Published by other agencies:

Water Supply Outlook Reports prepared by other agencies include: California — Snow Survey Branch, California Department of Water Resources, P.O. Box 388, Sacramento, CA 95802; British Columbia — The Ministry of Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia, V8V 1X5; Yukon Territory — Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory, Y1A 3V1; Alberta, Environment Technical Services Division, 9820 106th St., Edmonton, Alberta T5K 2J6.

# Idaho Water Supply Outlook

and

## Federal — State — Private Cooperative Snow Surveys

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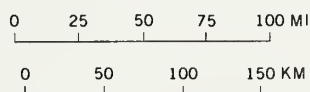
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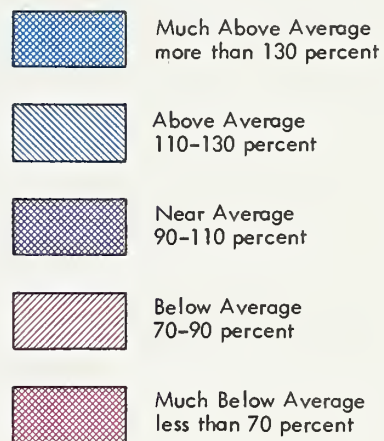




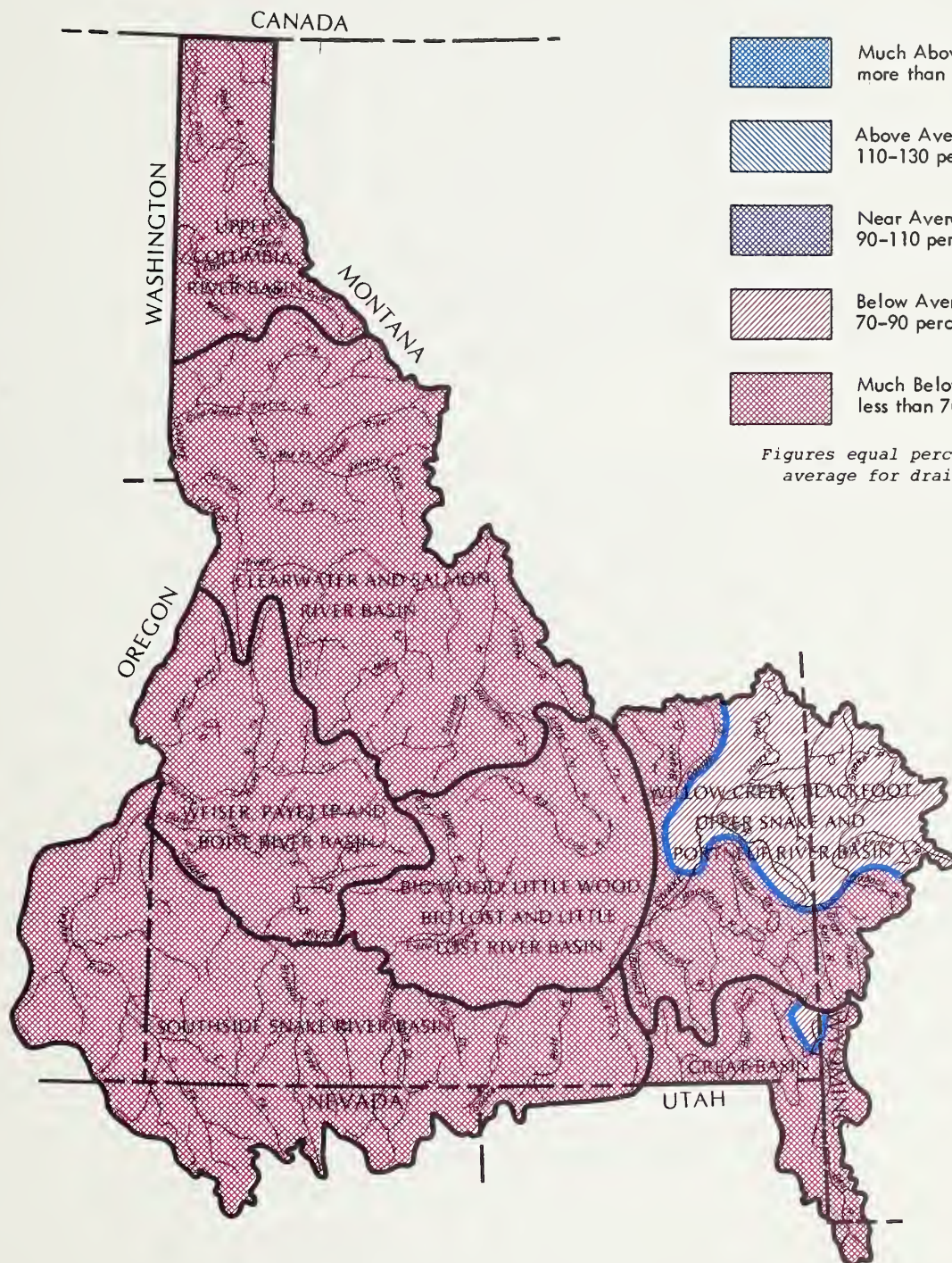
# STREAMFLOW PROSPECTS IDAHO



## LEGEND



*Figures equal percent of  
average for drainage.*





## GENERAL OUTLOOK

### SUMMARY:

IN GENERAL, MARCH 1 SNOW SURVEYS SHOW LITTLE OR NO IMPROVEMENT IN IDAHO'S MOUNTAIN SNOWPACK AND CONDITIONS REMAIN BELOW TO WELL BELOW AVERAGE THROUGHOUT THE STATE. THE LOW SNOWPACK COUPLED WITH DRY SOILS AND LOW RESERVOIR STORAGE LEVELS PAINT A BLEAK WATER SUPPLY PICTURE FOR THE STATE. STREAMFLOWS FOR THE FORTHCOMING IRRIGATION SEASON ARE FORECAST TO BE WELL BELOW NORMAL AND WATER IS EXPECTED TO BE IN SHORT SUPPLY OVER PORTIONS OF CENTRAL AND SOUTHCENTRAL IDAHO. WATER USERS ARE ADVISED TO STAY IN TOUCH WITH THEIR LOCAL WATER MASTER TO ASSESS THEIR INDIVIDUAL WATER SUPPLY SITUATION. FARMERS AND RANCHERS SHOULD USE EFFECTIVE MEASURES TO ACHIEVE MAXIMUM USE OF THE AVAILABLE WATER SUPPLY. A LIST OF SUGGESTED CONSERVATION PRACTICES CAN BE FOUND IN THE BACK OF THIS REPORT.

### SNOWPACK:

February brought good improvement in snowpack conditions in the Coeur d'Alene, Spokane, and Clearwater basins of northern Idaho and slight improvement in the Henry's Fork and Upper Snake basins in eastern Idaho and western Wyoming. Elsewhere, conditions remained about the same or have decreased slightly in comparison to normal from a month ago. March 1 snowpacks remain below to well below normal throughout the state with the worst conditions in the south central mountains and the lower elevation basins of the Idaho Panhandle. Currently, snowpack conditions range from a low of 50% of average on the Palouse River basin to a high of 86% on the Snake River above Jackson, Wyoming. Snowpacks range from 50 to 71% of normal in the Idaho Panhandle, 68 to 81% on the Clearwater and Salmon drainages, 51 to 68% in southcentral Idaho, 61 to 80% in the eastern part of the state, and 58 to 79% in extreme southern and southeastern Idaho. Above normal temperatures during the last half of February began melting some lower elevation snowpacks. This melt is about 2 weeks earlier than normal and similar to the timing of last year's snowmelt. If mild temperatures continue, snowmelt and runoff could occur 2-4 weeks early again this year.



## PRECIPITATION:

It was another below normal precipitation month as the drought continues. February began with several significant storms that crossed the state during the first two weeks of February, but the remainder of the month was very dry. The state received about 40% of normal precipitation for February, but the range was quite wide. Southcentral Idaho was extremely low with Burley at only 3% of normal, Jerome 5%, and Twin Falls 10%. The remainder of southern Idaho did not fare much better with the southwest from just 3% at Parma to 40% of normal at Boise. Southeast Idaho ranged from 11% at Malad to 24% at Idaho Falls. The central portion of Idaho was somewhat better, but still well below normal from 33% at McCall to 73% at Dixie. There were isolated pockets of normal rainfall, with Fenn Ranger Station at 112%. The northern third of the state recorded the most rainfall with Pierce at 85% of normal and Elk River 72%. Porthill at 34%, and Sandpoint at 43% were among the lowest precipitation amounts in the north. It was an unusually warm month. Record high temperatures were observed at Lewiston, Boise, Twin Falls, and Pocatello. The warmest days occurred on the 28th and 29th of February. Salmon recorded a departure of plus 5 degrees for the month and Pocatello plus 3.3 degrees. All stations averaged above normal.

## RESERVOIRS:

Carryover storage remains below to well below normal in most reservoirs across the state except in the Upper Snake basin where storage levels are near or slightly above normal. The combined storage in 24 key reservoirs is currently 87% of average, but only 58% of capacity. The lowest storage volumes are found in south central and southwestern Idaho where storage levels range from only 23% of average (12% of capacity) in Magic Reservoir to 95% of average (38% of capacity) in Lucky Peak. Reservoir levels in northern Idaho are below normal also, ranging from 46% of normal in Coeur d'Alene Lake to 88% in Dworshak. One exception is Priest Lake which reports 130% of normal storage. With the deficient snowpack and possibility of early irrigation withdrawals, many reservoir systems across central, southcentral, and southwestern Idaho are not likely to fill this spring.

## STREAMFLOW:

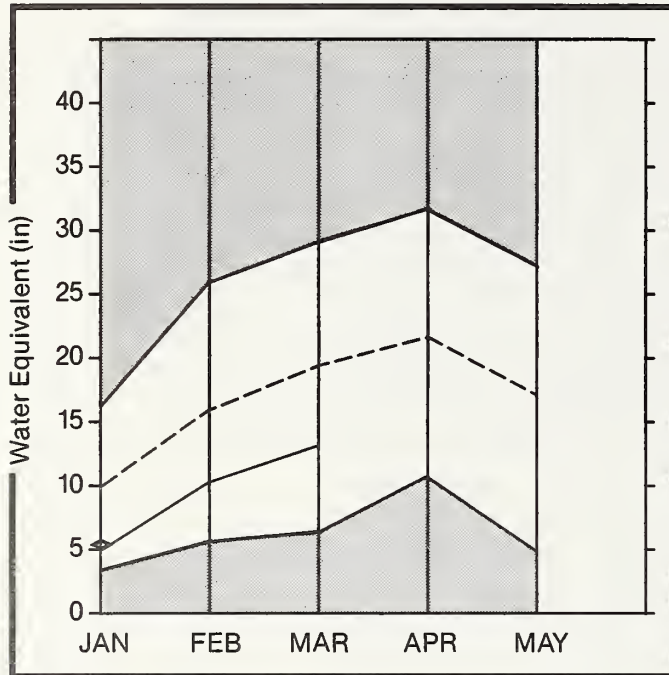
Much of Idaho's water supply for the 1988 irrigation season will be marginal at best. Spring and summer streamflow projections indicate that below to well below normal flows will occur on most streams throughout the state. Apr-July volume forecasts range from 59 to 66% of normal in northern Idaho, 50 to 67% in the central, southcentral, and southwestern part of the state, 70 to 80% in the Upper Snake Basin and 50-75% in the Great Basin area of southeastern Idaho. Water is expected to be in short supply in most areas of central, southcentral, and southwestern Idaho. Supplies should be adequate to meet most user needs on the Snake mainstem in eastern Idaho, but some shortages may occur on the lower elevation tributaries of the Portneuf and Blackfoot. Water users are advised to contact irrigation districts, reservoir managers, and others who monitor and regulate water supplies for more information.

## RECREATIONAL OUTLOOK:

Recreational river boaters need to continue to view below normal streamflow forecasts as an opportunity to access Idaho's mountain rivers earlier than normal. Late May or early June launch dates look very probable at this time. Desert river floating, such as the Jarbidge, Bruneau, and Owyhee, will depend largely on precipitation and temperature patterns in April and May. Above normal temperatures over an extended period of time in early spring could preclude summer outings on desert rivers.

# Upper Columbia Basin

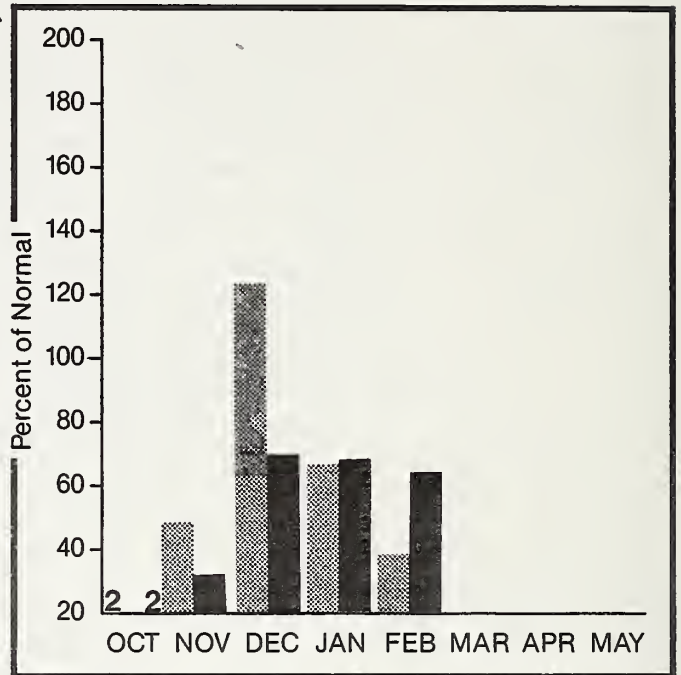
**Mountain snowpack\* (inches)**



\*Based on selected stations

Maximum ——— Average - - - -  
Minimum ——— Current ———

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation Year to date precipitation

## WATER SUPPLY OUTLOOK:

The March 1 snow surveys show good improvement in snowpack conditions on the Coeur d'Alene and St. Joe River basins, but elsewhere conditions remain about the same as reported on February 1. Snowpacks currently range from a low of 50% of average on the Palouse basin to 71% on the Priest River, with most basins in the 59-66% of average range. Apr-July streamflow forecasts are well below normal and remain about the same or have decreased slightly from those issued last month. Forecasts currently range from 57 to 66% of normal. Reservoir carryover storage varies from only 46% of normal in Coeur d'Alene Lake to 130% of average in Priest Lake. Soils are also much drier than normal as a result of the dry summer and fall conditions.

For more information contact your local Soil Conservation Service office.



# UPPER COLUMBIA RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
KOOTENAI at Leona 2	APR-SEP	8441.0	5570.0	66	7260.0	86	3800.0	45
	APR-JUL	7340.0	4840.0	66	6300.0	86	3300.0	45
	APR-JUN	5899.0	3890.0	66	5000.0	85	2700.0	46
CLARK FORK at White Horse Rapids 2	APR-SEP	13370.0	9090.0	68	12100.0	91	6020.0	45
	APR-JUL	12150.0	8260.0	68	11000.0	91	5470.0	45
	APR-JUN	10360.0	7045.0	68	9430.0	91	4660.0	45
PEND OREILLE LAKE inflow 2	APR-SEP	14930.0	9880.0	66	13120.0	88	6600.0	44
	APR-JUL	13650.0	9040.0	66	12000.0	88	6040.0	44
	APR-JUN	11780.0	7770.0	66	10400.0	88	5180.0	44
PRIEST RIVER at Priest 2	APR-SEP	893.0	585.0	66	815.0	91	355.0	40
	APR-JUL	838.0	550.0	66	770.0	92	335.0	40
SPOKANE at Post Falls 2	APR-SEP	2820.0	1700.0	60	2680.0	95	700.0	25
	APR-JUL	2723.0	1660.0	61	2600.0	95	750.0	28
ST. JOE at Calder	APR-SEP	1281.0	780.0	61	1080.0	84	470.0	37
	APR-JUL	1211.0	735.0	61	1020.0	84	445.0	37
COEUR D' ALENE at Enaville	APR-SEP	830.0	475.0	57	860.0	104	170.0	20
	APR-JUL	789.0	445.0	56	820.0	104	160.0	20

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
HUNGRY HORSE	3451.0	1400.0	2295.0	2257.0	Kootenai ab Bonners Ferry	54	84	64
FLATHEAD LAKE	1791.0	889.0	635.1	901.0	Pend Oreille River	162	103	70
PEND OREILLE	1155.0	560.4	150.7	831.8	Clark Fork River	111	113	73
NOXON RAPIDS	335.0	321.6	291.7	297.6	Priest River	5	92	71
COEUR D'ALENE	222.8	102.2	123.2	220.9	Rathdrum Creek	3	91	71
PRIEST LAKE	97.7	44.8	32.8	34.4	Havden Lake	4	86	60
					Coeur d'Alene River	10	95	66
					St. Joe River	7	97	66
					Spokane River	21	95	66
					Palouse River	2	64	50

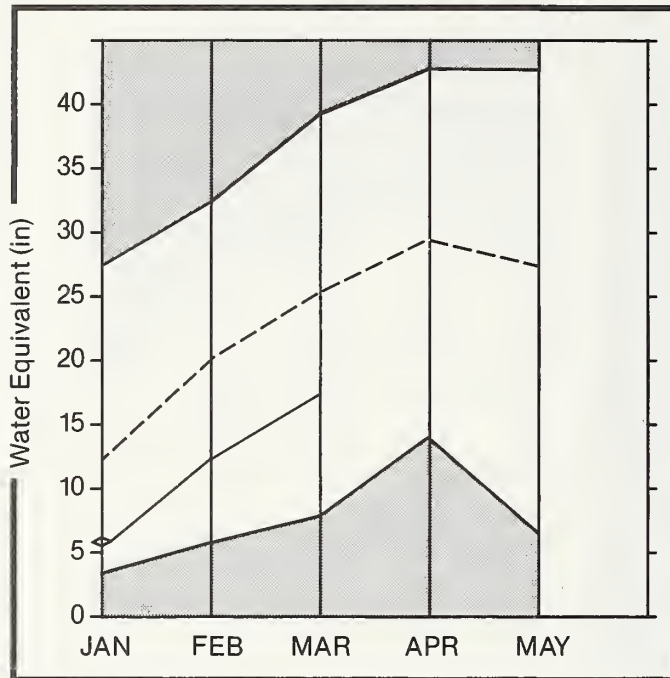
1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.

2 - Corrected for upstream diversions or changes in reservoir storage.





The average is computed for the 1961-85 base period.

# Clearwater and Salmon River Basin

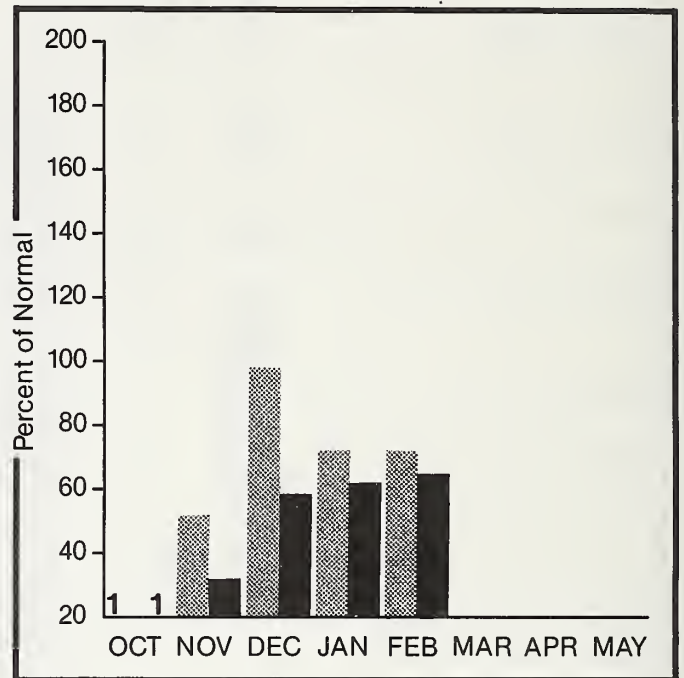
**Mountain snowpack\* (inches)**





\*Based on selected stations

Maximum  Average   
 Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snow accumulation during February was near normal over much of the headwater areas of the Clearwater and Lemhi River drainages, resulting in improvement in the snowpack conditions. Snowpacks, however, remain below to well below normal ranging from 68% of average on the Salmon above Salmon and the N. Fk. Clearwater to 81% on the Selway. Apr-July streamflow projections remain about the same on the Clearwater and have been reduced on the Salmon. Apr-July forecasts remain well below normal, ranging from 59% of average on the Salmon at Whitebird to 66% on the Clearwater at Spalding. Soil profiles remain very dry and are expected to absorb above normal amounts of snowmelt water. Dworshak Reservoir is currently at only 53% of capacity and is not expected to fill to capacity.

# CLEARWATER AND SALMON RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
CLEARWATER at Orofino	APR-SEP	5163.0	3350.0	65	5060.0	98	1750.0	34
	APR-JUL	4889.0	3220.0	66	4800.0	98	1660.0	34
CLEARWATER at Spalding	APR-SEP	8378.0	5530.0	66	8000.0	95	3000.0	36
	APR-JUL	7916.0	5120.0	65	7500.0	95	2700.0	34
DWORSHAK RESERVOIR inflow	APR-SEP	3010.0	1770.0	59	2760.0	92	780.0	26
	APR-JUL	2822.0	1670.0	59	2600.0	92	740.0	26
SALMON at Whitebird	APR-SEP	7007.0	4150.0	59	6180.0	88	2240.0	32
	APR-JUL	6322.0	3800.0	60	5560.0	88	2000.0	32
SALMON at Salmon	APR-SEP	1077.0	650.0	60	1070.0	99	260.0	24
	APR-JUL	919.0	565.0	61	910.0	99	220.0	24

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
DWORSHAK	3467.8	1835.2	2492.0	2084.1	North Fork Clearwater	13	104	68
					Lochsa River	4	121	79
					Selway River	5	121	81
					Clearwater River	19	110	72
					Salmon River ab Salmon	13	119	68
					Lemhi River	8	105	80
					Salmon River Total	34	116	69

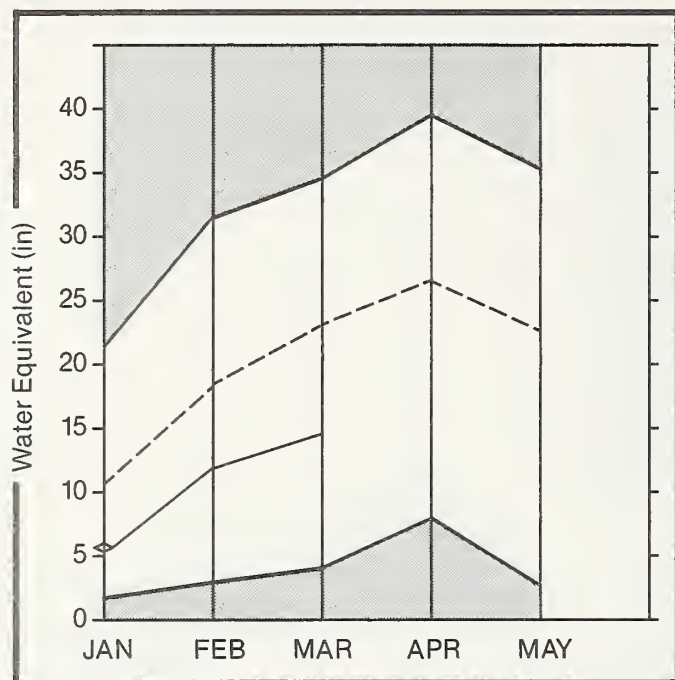
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


The average is computed for the 1961-85 base period.

# Weiser, Payette, and Boise River Basin

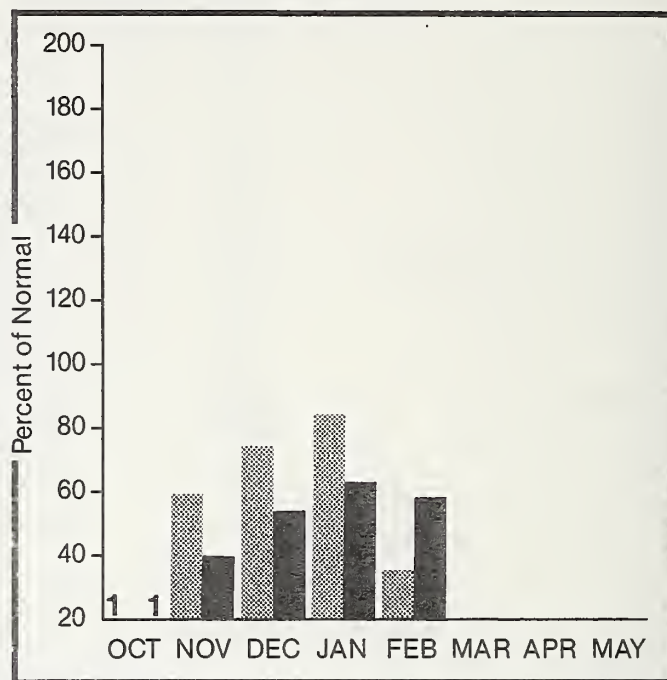
Mountain snowpack\* (inches)





\*Based on selected stations

Maximum  Average   
Minimum  Current 

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

March 1 snow surveys show little or no change in the snowpack conditions over the past month. Snowpacks remain well below normal throughout the basin, ranging from 61 to 68% of average. Soil profiles are also very dry and are expected to absorb above normal amounts of snowmelt water. Apr-July seasonal streamflow forecasts have again been reduced and now range from 51% of average on the Weiser nr Weiser to 64% on the inflow to Deadwood Reservoir. Reservoir storage levels also remain well below normal with most reservoirs reporting between 41 and 67% of normal storage volumes. The Boise Reservoir system is not expected to fill and filling of Cascade Reservoir is questionable at this time. Water is expected to be in very short supply on the Weiser and Boise River systems. The amount and timing of spring and early summer precipitation will be critical factors in determining the available water supply. Water users should keep in touch with their local irrigation district for estimates of the supply available to them.



# WEISER, PAYETTE AND BOISE RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
WEISER nr Weiser	APR-SEP	444.0	225.0	51	460.0	104	45.0	10
	APR-JUL	414.0	215.0	52	425.0	103	40.0	10
PAYETTE RIVER at Horseshoe Bend	APR-SEP	1862.0	1120.0	60	1600.0	86	635.0	34
	APR-JUL	1717.0	1030.0	60	1480.0	86	580.0	34
NF PAYETTE RIVER at Cascade 2	APR-SEP	568.0	340.0	60	475.0	84	205.0	36
	APR-JUL	531.0	320.0	60	445.0	84	190.0	36
NF PAYETTE RIVER nr Banks 2	APR-SEP	737.0	440.0	60	615.0	83	260.0	35
	APR-JUL	691.0	415.0	60	580.0	84	250.0	36
SF PAYETTE RIVER at Lowman	APR-SEP	516.0	320.0	62	425.0	82	210.0	41
	APR-JUL	458.0	285.0	62	380.0	83	190.0	41
DEADWOOD RESERVOIR inflow	APR-JUL	143.0	91.0	64	123.0	86	58.0	41
BOISE RIVER nr Twin Springs 1	APR-SEP	722.0	435.0	60	585.0	81	290.0	40
	APR-JUL	664.0	400.0	60	540.0	81	265.0	40
SF BOISE at Anderson Dam 1	APR-SEP	619.0	340.0	55	455.0	74	220.0	36
	APR-JUL	578.0	320.0	55	430.0	74	210.0	36
BOISE RIVER nr Boise 1	APR-SEP	1628.0	985.0	61	1200.0	74	590.0	36
	APR-JUL	1508.0	895.0	59	1300.0	86	470.0	31
	APR-JUN	1334.0	800.0	60	1160.0	87	430.0	32

RESERVOIR STORAGE		(1000AF)			WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **			WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF	
		THIS YEAR	LAST YEAR	AVG.			LAST YR.	AVERAGE
MANH CREEK	11.3	2.8	4.4	6.8	Manh Creek	5	100	61
CASCADE	703.2	363.1	471.3	393.8	Weiser River	9	101	61
DEADWOOD	162.0	67.7	91.8	84.5	North Fork Payette	10	106	66
ANDERSON RANCH	464.2	123.1	369.7	282.1	South Fork Payette	7	118	63
ARROWROCK	286.6	156.6	233.4	234.8	Payette River Total	16	110	64
LUCKY PEAK	307.0	116.3	81.4	122.5	Middle & North Fork Boise	9	131	65
LAKE LOWELL (DEER FLAT)	177.0	88.9	156.5	140.6	South Fork Boise River	11	135	64
					Boise River Total	20	128	64
					Carvon Creek	3	122	68

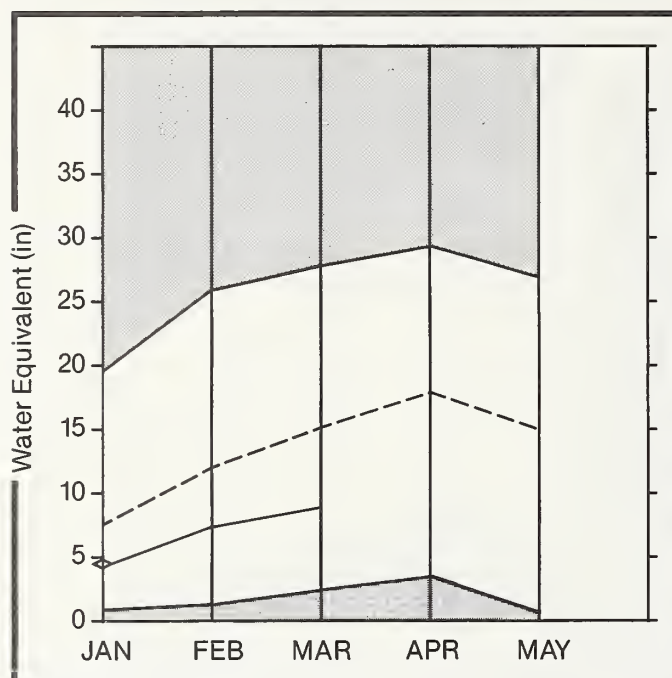
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# Big Wood, Little Wood, Big Lost, and Little Lost River Basin

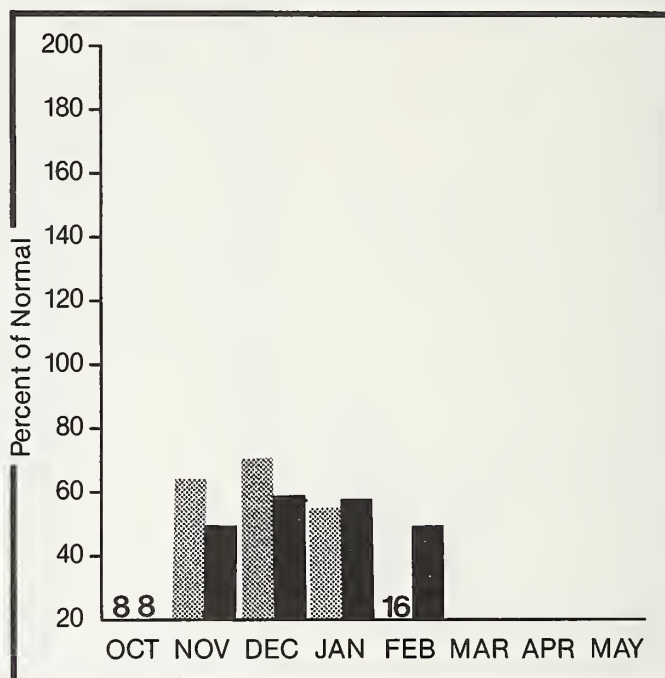
Mountain snowpack\* (inches)





\*Based on selected stations

Maximum ——— Average - - - - -  
Minimum ——— Current ———

Precipitation\* (percent of normal)



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack conditions in this basin show a decline in comparison to normal during February. Snowpacks are well below normal, ranging from only 51 to 62% of average on all basins except the Little Lost which reports 77% of normal snow accumulation. Soil moisture conditions are very dry and will absorb above normal amounts of snowmelt water this spring. Apr-July streamflows are forecast to be better than last year but well below normal, ranging from only 50% of normal on Magic Reservoir inflow to 67% on the Little Lost below Wet Creek. Reservoir levels are also very low, ranging from only 23% of normal (12% of capacity) on Magic Reservoir to 83% of average (49% of capacity) in Little Wood Reservoir. Magic Reservoir is not expected to fill and marginal water supplies are expected on most basins, particularly on the Big Wood system. The amount and timing of spring precipitation will be important factors in determining the available water supply. Water users should keep in touch with their local irrigation district for estimates of the supply available to them.



# BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BIG WOOD nr Bellevue	APR-SEP	217.0	117.0	54	170.0	78	60.0	28
	APR-JUL	202.0	111.0	55	160.0	79	55.0	27
MAGIC RESERVOIR inflow	APR-SEP	338.0	169.0	50	360.0	107	70.0	21
	APR-JUL	322.0	161.0	50	345.0	107	65.0	20
LITTLE WOOD nr Carey	APR-SEP	107.0	54.0	50	85.0	79	25.0	23
	APR-JUL	99.0	50.0	51	78.0	79	22.0	22
BIG LOST at Howell Ranch	APR-SEP	219.0	140.0	64	200.0	91	65.0	30
	APR-JUL	192.0	123.0	64	180.0	94	55.0	29
	APR-JUN	148.0	95.0	64	140.0	95	45.0	30
BIG LOST nr Mackay 2	APR-SEP	195.0	120.0	62	190.0	97	50.0	26
LITTLE LOST b1 Wet Ck.	APR-SEP	38.8	26.0	67	40.0	103	12.0	31
	APR-JUL	31.4	21.0	67	33.0	105	10.0	32
LITTLE LOST nr Howe	APR-SEP	44.0	29.0	66	45.0	102	10.0	23
	APR-JUL	33.0	22.0	67	34.0	103	9.0	27

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
MAGIC	191.5	23.6	119.7	102.4	Big Wood ab Magic	10	131	58
LITTLE WOOD	30.0	14.6	23.6	17.6	Carnes Creek	6	122	60
CAREY VALLEY		NO REPORT			Big Wood Total	15	126	58
MACKAY	44.5	26.7	35.9	32.6	Little Wood River	4	139	55
					Fish Creek	3	125	51
					Big Lost River	9	132	62
					Little Lost River	4	149	77

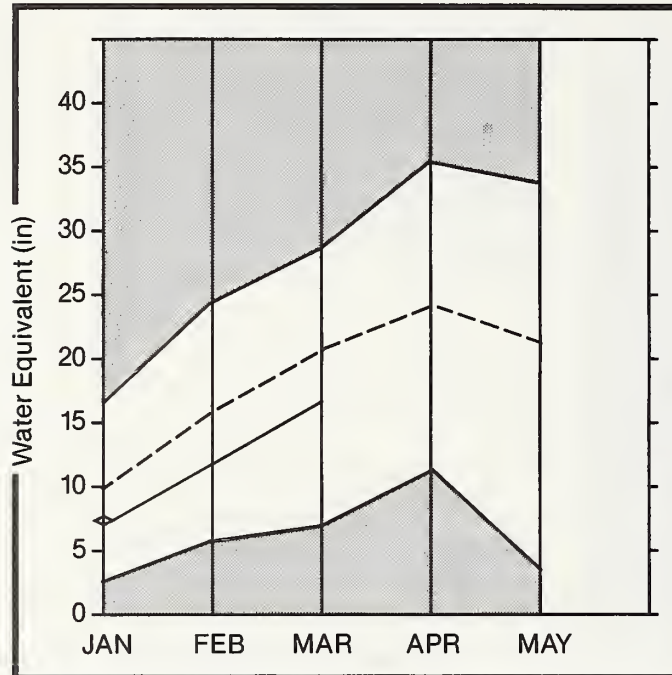
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2 - Corrected for upstream diversions or changes in reservoir storage.


The average is computed for the 1961-85 base period.

# Willow Creek, Blackfoot, Upper Snake, and Portneuf River Basin

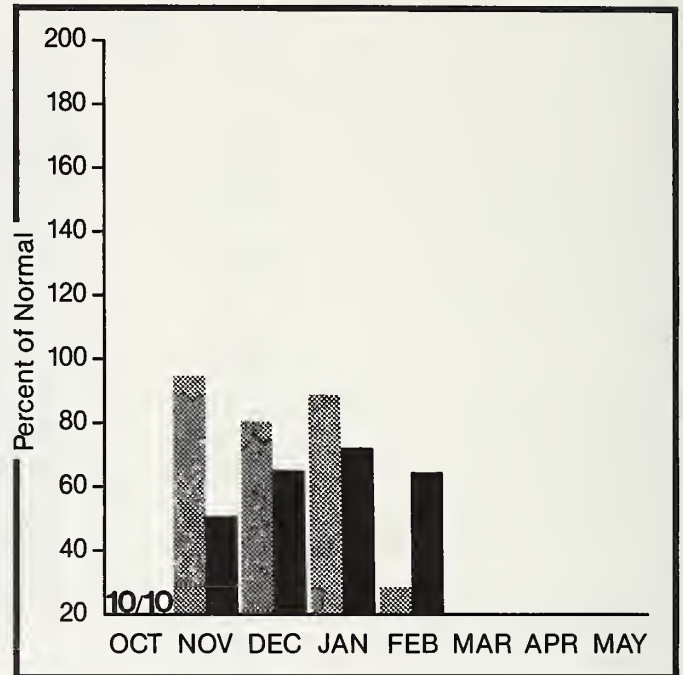
**Mountain snowpack\* (inches)**





\*Based on selected stations

Maximum  Average   
Minimum  Current 

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack conditions show a slight improvement in comparison to normal over those reported last month, but remain below to well below average for March 1. Currently, basin snowpacks range from 61% on the Beaver-Camas Creek drainage near Dubois to 86% on the Snake mainstem above Jackson, Wyoming. Apr-July seasonal volume streamflows are forecast to be below to well below normal ranging from 69% on the Portneuf at Topaz to 80% on the Snake at Moran. Reservoir carryover storage is reported to be good with most major reservoirs reporting near to slightly above normal storage volumes. Palisades Reservoir reports the lowest storage level at 81% of average storage. In general, water supplies are expected to be adequate to meet most user needs on the Snake mainstem. Some minor shortages may occur on the lower elevation basins of the Portneuf and Blackfoot. The amount and timing of spring and early summer precipitation will play an important role in determining the available water supply in these basins.

**WILLOW CREEK, BLACKFOOT, UPPER SNAKE AND FORTNEUF RIVER BASIN**

**STREAMFLOW FORECASTS**

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
HENRY'S FORK nr Ashton 2	APR-SEP	746.0	535.0	72	610.0	82	460.0	62
	APR-JUL	557.0	400.0	72	455.0	82	345.0	62
HENRYS FORK nr Rexburg 2	APR-SEP	1595.0	1120.0	70	1370.0	86	765.0	48
	APR-JUL	1260.0	880.0	70	1080.0	86	605.0	48
FALLS RIVER nr Squirrel	APR-JUL	373.0	275.0	74	345.0	92	205.0	55
TETON RIVER ab S Leigh Ck	APR-SEP	194.0	147.0	76	175.0	90	120.0	62
	APR-JUL	145.0	110.0	76	130.0	90	90.0	62
TETON nr St. Anthony	APR-SEP	479.0	365.0	76	425.0	89	295.0	62
	APR-JUL	387.0	295.0	76	350.0	90	240.0	62
SNAKE at Moran 1	APR-SEP	888.0	710.0	80	835.0	94	575.0	65
PALISADES LAKE inflow 1	APR-SEP	3852.0	2850.0	74	3700.0	96	1950.0	51
SNAKE nr Heise 2	APR-SEP	4142.0	3070.0	74	4000.0	97	2100.0	51
	APR-JUL	3524.0	2610.0	74	3400.0	96	1800.0	51
SNAKE nr Blackfoot 2	APR-SEP	5680.0	4090.0	72	5200.0	92	3000.0	53
	APR-JUL	4589.0	3320.0	72	4200.0	92	2400.0	52
FORTNEUF at Topaz	MAR-SEP	109.0	75.0	69	110.0	101	35.0	32
	MAR-JUL	88.0	62.0	70	95.0	108	30.0	34

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
ISLAND PARK	127.6	118.2	123.0	110.1	Camas-Beaver Creeks	4	128	62
GRASSY LAKE	15.2	9.2	13.0	10.9	Henrys Fork River	13	137	76
JACKSON LAKE	624.4	96.1	91.0	535.9	Teton River	9	123	80
PALISADES	1200.0	835.3	1257.2	1028.0	Snake above Palisades	33	118	78
AMERICAN FALLS	1700.0	1350.9	1385.8	1277.2	Snake above Jackson Lake	9	150	86
BROWNLEE	975.3	601.1	619.2	531.0	Gros Ventre River	3	86	74
BLACKFOOT	348.7	251.1	---	242.1	Greys River	5	120	75
HENRY'S LAKE	90.4	78.1	75.8	79.4	Salt River	6	110	68
FIRIE	96.5	49.8	50.0	51.3	Willow Creek	11	106	72
					Blackfoot River	8	114	71
					Fortneuf River	11	115	67
					Toponce Creek	3	113	63

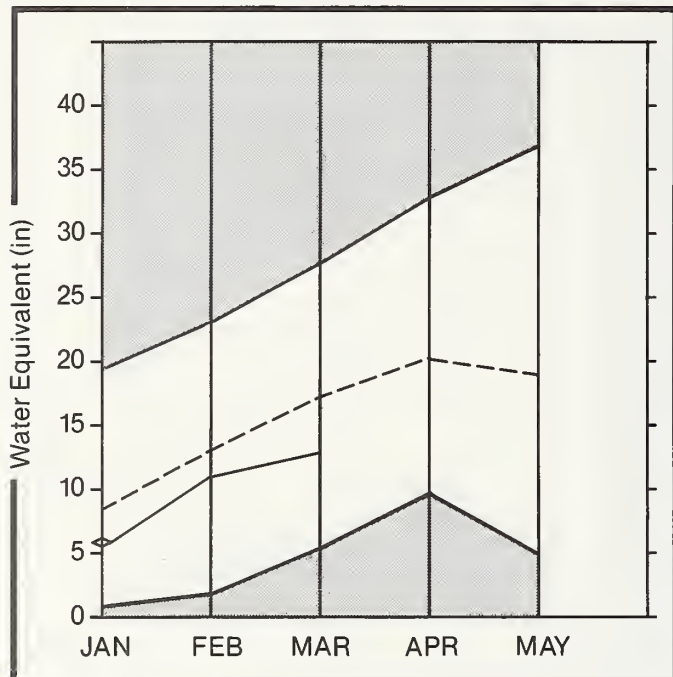
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The average is computed for the 1961-85 base period.

# Southside Snake River Basin

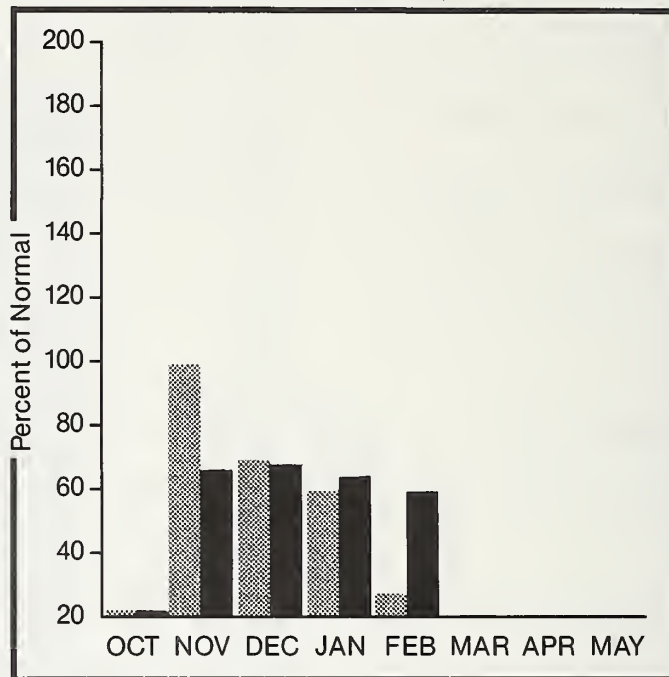
**Mountain snowpack\* (inches)**



\*Based on selected stations

Maximum ——— Average - - - - -  
Minimum ——— Current ———

**Precipitation\* (percent of normal)**



\*Based on selected stations

Monthly precipitation [hatched bar] Year to date precipitation [solid black bar]

## WATER SUPPLY OUTLOOK:

March 1 snowpack conditions show little change in comparison to normal from those reported on February 1. Basin snowpacks remain below to well below normal, ranging from 64 to 79% of average. March-July and Apr-July seasonal volume streamflows are expected to be well below normal, ranging from 54% on the Owyhee Lake inflow to 67% on the Salmon Falls Cr. nr Jacinto. Reservoir storages are also very low, ranging from only 43% of average (17% of capacity) in Oakley Reservoir to 71% of average (21% of capacity) in Salmon Falls. Owyhee Reservoir is 49% of average and 30% of capacity. Soils are dry under the snowpack and are expected to absorb above normal amounts of snowmelt water. Water supplies are expected to be marginal in most basins. The amount of spring and early summer precipitation will be important factors in determining the amount of water available.



# SOUTHSIDE SNAKE RIVER BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
OAKLEY RESERVOIR inflow	APR-SEP	33.0	19.3	59	32.0	97	7.0	21
	APR-JUL	29.7	17.8	60	29.0	98	7.0	24
SALMON FALLS CK nr San Jacinto	MAR-SEP	102.0	68.0	67	109.0	107	27.0	26
	MAR-JUL	97.0	66.0	68	105.0	108	27.0	28
	MAR-JUN	91.0	62.0	68	98.0	108	26.0	29
BRUNEAU nr Hot Spring	MAR-SEP	260.0	169.0	65	270.0	104	70.0	27
	MAR-JUL	248.0	161.0	65	255.0	103	65.0	26
OWYHEE RIVER nr Gold Creek 2	APR-JUL	27.8	16.6	60	33.0	119	2.0	7
OWYHEE RIVER nr Owyhee 2	APR-JUL	86.0	47.0	55	93.0	108	4.0	5
OWYHEE LAKE inflow 1	APR-SEP	455.0	245.0	54	575.0	126	50.0	11
	APR-JUL	427.0	235.0	55	545.0	128	90.0	21
OWYHEE at Rome 2	APR-JUL	376.0	200.0	53	385.0	102	40.0	11

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS		
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE **	THIS YEAR	LAST YEAR	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE
OAKLEY	77.4	12.9	30.8	29.9	Raft River	9	106 66
SALMON FALLS	182.6	38.8	94.9	53.9	Goose-Trapper Creeks	5	118 64
OWYHEE	715.0	219.4	519.2	486.6	Salmon Falls Creek	12	117 72
					Bruneau River	13	119 73
					Owyhee River	30	90 64

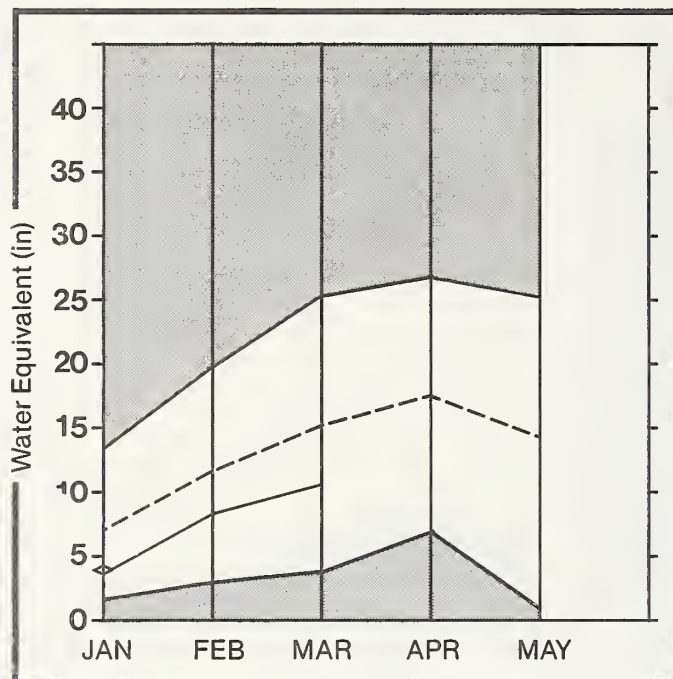
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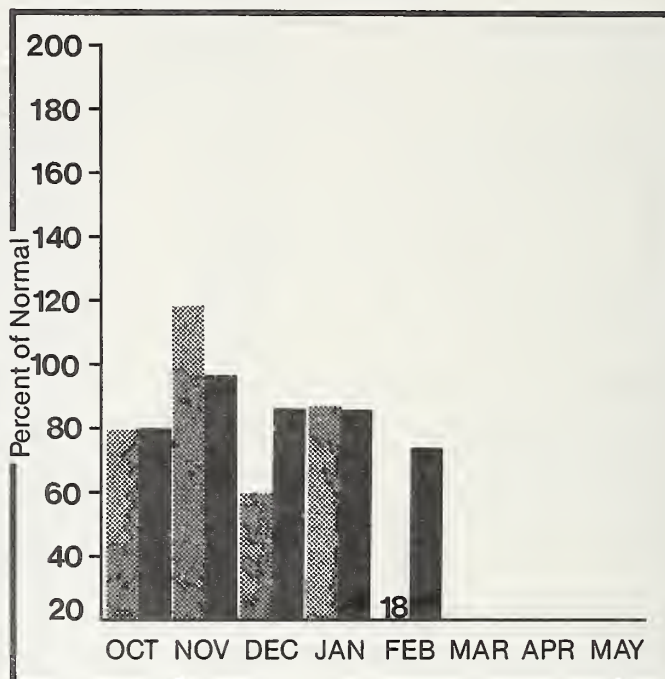
# Great Basin

**Mountain snowpack\*** (inches)





\*Based on selected stations

**Precipitation\*** (percent of normal)



\*Based on selected stations

Maximum  Average   
Minimum  Current 

Monthly precipitation  Year to date precipitation 

## WATER SUPPLY OUTLOOK:

Snowpack conditions remain below normal for March 1, ranging from 58% of average on the Malad drainage to 76% of the Montpelier Creek drainage. Apr-July water supply forecasts currently range from 50% on the Bear at Harer to 75% on Montpelier Creek near Montpelier. Bear Lake reports near normal storage for March 1 at 104% of average, while Montpelier Creek Reservoir reports 71% of normal storage. Soil moisture conditions in this basin are near average and water supplies are expected to be adequate to meet most user needs providing normal precipitation occurs through the spring and early summer.

For more information contact your local Soil Conservation Service office.



# GREAT BASIN

## STREAMFLOW FORECASTS

FORECAST POINT	FORECAST PERIOD	25 YR. AVG. (1000AF)	MOST PROBABLE (1000AF)	MOST PROBABLE (% AVG.)	REAS. MAX. (1000AF)	REAS. MAX. (% AVG.)	REAS. MIN. (1000AF)	REAS. MIN. (% AVG.)
BEAR at Harer	APR-SEP	310.0	155.0	50	305.0	98	60.0	19
MONTPELIER CK nr Montpelier	APR-SEP	13.9	10.5	75	16.0	115	5.0	36
CUB RIVER nr Preston	APR-SEP	51.8	35.0	68	51.0	99	19.0	37
	APR-JUL	46.8	32.0	68	46.0	98	18.0	38

RESERVOIR STORAGE (1000AF)					WATERSHED SNOWPACK ANALYSIS			
RESERVOIR	USEABLE CAPACITY	** USEABLE STORAGE ** THIS YEAR	LAST YEAR	AVG.	WATERSHED	NO. COURSES AVG'D	THIS YEAR AS % OF LAST YR. AVERAGE	
BEAR LAKE	1421.0	1036.2	1051.5	992.5	Bear River (above Harer)	11	110	69
MONTPELIER CREEK	3.4	1.2	2.2	1.7	Montpelier Creek	7	142	76
					Mink Creek	6	130	69
					Cub River	4	121	67
					Malad River	7	140	57

1 - Reas. max. and reas. min. forecasts are for 5% and 95% exceedance levels and also (2) below.  
 2 - Corrected for upstream diversions or changes in reservoir storage.  
 The average is computed for the 1961-85 base period.

# SNOW DATA MEASUREMENTS

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
UPPER COLUMBIA BASIN							WATERSHED I						
ABOVE BURKE	410U	2/25/88	40	12.4	10.4	19.0	MOUNTAIN MEADOWS	636U	3/01/88	---	14.1E	10.6	20.8
ABOVE ROLAND	4350	3/01/88	---	15.3E	---	27.0	MOUNTAIN MDWS PILLOW	6360	3/01/88	---	16.3	12.6	23.2
BEAR MOUNTAIN	5400	2/23/88	87	32.6	31.9	53.0	NEZ PERCE PASS	6570	2/27/88	41	13.6	9.0	15.0
BEAR MTN PILLOW	5400	3/01/88	---	30.4	41.5	53.8	PERREAU MEADOWS	8500	3/01/88	33	9.4	8.3	14.8
BENTON MEADOW	2370	2/26/88	12	4.0	2.8	6.0	PIERCE R.S.	3080	2/26/88	22	7.4	7.0	10.0
BENTON SPRING	4920	2/26/88	34	10.4	13.3	17.2	REDFISH LAKE FLAT	656U	3/01/88	27	6.8	5.9	10.7
BREEZY SADDLE	5010	2/25/88	63	19.6	18.1	27.7	ROCK FLAT SUMMIT	5310	2/28/88	37	10.4	11.6	16.6
CHILCO RIDGE	3650	2/29/88	7	2.7	3.0	6.2	SADDLE MOUNTAIN	7940	2/26/88	52	16.8	13.4	22.0
CONIE RIDGE	3900	2/29/88	9	3.3	4.2	7.4	SAVAGE PASS	6170	3/02/88	53	18.6	15.0	23.3
COPPER RIDGE	4820	2/26/88	44	15.5	19.6	23.8	SAVAGE PASS PILLOW	6170	3/01/88	---	18.7	15.2	24.6
CORNER CREEK	3150	2/29/88	19	6.2	6.9	6.6	SCHWARTZ LAKE	8540	2/24/88	31	8.9	8.5	10.5
EAST RAGGED SADDLE	3740	2/28/88	40	13.9	14.4	18.0	SECESH SUMMIT	6520	2/27/88	60	21.0	16.8	30.8
EAST TWIN	4130	2/29/88	16	5.7	7.3	9.9	SECESH SUMMIT PILLOW	6520	3/01/88	---	21.0	15.6	31.2
FORTY-NINE MEADOWS	4830	2/25/88	63	19.1	17.1	26.3	SHANGHAI SUMMIT	4570	2/25/88	47	14.4	16.1	23.4
FOURTH OF JULY SUM	3200	2/25/88	20	6.2	6.2	8.2	SHANGHAI SUM PILLOW	4570	3/01/88	---	15.3	17.1	24.8
HUMBOLDT GULCH	4250	2/25/88	35	10.4	8.5	14.2	SHERWIN	3200	3/01/88	25	8.3	8.5	12.3
HUMBOLDT GLCH PILLOW	4250	3/01/88	---	7.6	8.4	13.2	SHERWIN PILLOW	3200	3/01/88	---	7.5	6.7	11.5
KELLOGG PEAK AM	5560	3/01/88	---	18.2E	16.9	27.3	SQUAW MEADOW	5900	2/27/88	60	21.2	18.8	31.4
LOOKOUT	5140	2/25/88	61	18.4	20.5	29.5	TWIN LAKES	6510	2/24/88	86	28.1	28.2	36.5
LOOKOUT PILLOW	5140	3/01/88	---	17.7	20.7	28.4	TWIN PEAKS	9190	2/27/88	48	14.8	12.2	21.0
LOST LAKE	6110	2/25/88	90	30.1	33.1	48.9	VIENNA MINE	8960	2/26/88	60	19.9	15.0	31.2
LOST LAKE PILLOW	6110	3/01/88	---	31.3	41.8	55.0	VIENNA MINE PILLOW	8960	3/01/88	---	20.2	14.7	31.1
LOWER SANDS CREEK	3120	2/26/88	40	13.3	14.2	16.8	WEBB CREEK	4720	2/26/88	18	5.7	7.7	8.8
MOSQUITO RIDGE	5200	2/27/88	66	21.9	22.9	33.7	WEST BRANCH	5560	2/29/88	41	13.5	14.2	22.9
MOSQUITO PILLOW	5200	3/01/88	---	20.4	22.8	34.0	WEST BRANCH PILLOW	5560	3/01/88	---	13.7	13.5	23.0
ROLAND SUMMIT	5120	2/27/88	58	15.3	22.3	32.8							
SAGE CREEK SADDLE	4080	2/29/88	29	9.5	11.2	16.1							
SCHWEITZER BASIN	6090	2/25/88	84	31.1	30.9	40.4							
SCHWEITZER BN PILLOW	6090	3/01/88	---	33.7	33.4	42.4							
SCHWEITZER BOWL	4800	2/25/88	50	18.3	18.5	27.2							
SCHWEITZER RIDGE	6200	2/25/88	76	28.5	34.7	40.1							
SHERWIN	3200	3/01/88	25	8.3	8.5	12.3							
SHERWIN PILLOW	3200	3/01/88	---	7.5	6.7	11.5							
SKITWISH RIDGE	5110	2/26/88	56	18.9	21.9	30.2							
SUNSET	5540	3/01/88	70	17.0	19.4	28.1							
SUNSET PILLOW	5540	3/01/88	---	18.0	22.6	30.8							
TWIN SPIRIT DIVIDE	3480	2/27/88	30	8.7	10.0	12.2							
WEST TWIN	4220	2/29/88	9	3.7	7.3	8.8							
CLEARWATER AND SALMON BASINS							WATERSHED II						
ABOVE GILMORE	8200	2/29/88	28	6.6	5.6	7.8	ATLANTA SUMMIT	7600	2/25/88	61	19.8	14.1	30.2
ASPEN-HALL PASS AM	8200	2/29/88	28	6.3	6.7	8.5	ATLANTA SUM PILLOW	7580	3/01/88	---	18.1	14.2	27.4
BANNER SUMMIT	7040	2/26/88	49	15.8	13.5	25.8	ATLANTA TOWNSITE	5370	2/26/88	29	6.9	6.8	---
BANNER SUMMIT PILLOW	7040	3/01/88	---	15.6	12.9	23.2	BANNER SUMMIT	7040	2/26/88	49	15.8	13.5	25.8
BEAR BASIN	5350	2/29/88	37	11.5	12.8	17.6	BANNER SUMMIT PILLOW	7040	3/01/88	---	15.6	12.9	23.2
BEAR BASIN PILLOW	5350	3/01/88	---	10.6	9.6	17.6	BAD BEAR	4940	2/29/88	26	8.2	7.4	13.1
BIG CREEK SUMMIT	6580	2/27/88	64	21.7	19.9	31.5	BEAR BASIN	5350	2/29/88	37	11.5	12.8	17.6
BIG CREEK SUM PILLOW	6580	3/01/88	---	18.3	16.9	28.0	BEAR BASIN PILLOW	5350	3/01/88	---	10.6	9.6	17.6
BORAH	6200	2/27/88	12	3.3	3.6	4.9	BEAR SADDLE	6180	2/27/88	41	13.6	13.8	27.9
BOULDER CREEK	5440	2/29/88	35	12.1	11.0	21.1	BEAR SADDLE PILLOW	6180	3/01/88	---	13.5	13.1	27.8
BREEZY SADDLE	5010	2/25/88	63	19.6	18.1	27.7	BENNETT MOUNTAIN	6560	2/23/88	34	9.9E	7.8	15.2
BRUNDAGE MOUNTAIN	7560	3/01/88	---	27.1E	22.1	40.1	BENNETT MTN PILLOW	6560	3/01/88	---	8.4	9.2	16.4
BRUNO CREEK	7920	3/02/88	42	11.7	9.7	16.7	BIG CREEK SUMMIT	6580	2/27/88	64	21.7	19.9	31.5
CAYUSE AIRSTRIP	3500	2/25/88	27	8.1	6.8	11.2	BIG CREEK SUM PILLOW	6580	3/01/88	---	18.3	16.9	28.0
COOL CREEK	6250	2/25/88	96	30.2	27.9	42.6	BOGUS BASIN	6340	3/01/88	38	12.8	11.7	20.9
COOL CREEK PILLOW	6280	3/01/88	---	29.6	28.3	40.1	BOGUS BASIN ROAD	5540	3/01/88	6	1.9	2.7	5.8
COPE'S CAMP	7520	2/24/88	24	6.6	4.7	6.5	BOULDER CREEK	5440	2/29/88	35	12.1	11.0	21.1
CRATER MEADOWS	5960	2/25/88	83	27.2	24.8	38.0	BRUNDAGE MOUNTAIN	7560	3/01/88	---	27.1E	22.1	40.1
CRATER MDWS PILLOW	5960	3/01/88	---	27.9	26.2	40.0	BRUNDAGE RESV PILLOW	4500	3/01/88	---	14.4	13.8	---
CROOKED FORK	3610	3/02/88	33	10.8	7.8	11.9	CAMAS CREEK DIVIDE	5710	2/25/88	18	6.9	5.8	10.6
DEADWOOD SUMMIT	6860	2/26/88	73	26.9	21.6	40.2	CHINNEY CREEK	6400	2/25/88	28	8.0	7.4	13.9
DEADWOOD SUM PILLOW	6860	3/01/88	---	26.5	20.0	44.4	COUCH SUMMIT	6840	2/25/88	34	8.1	6.4	16.7
DOUBLE SPGS PASS AM	8380	2/26/88	32	7.8	6.2	8.7	COZY COVE	5380	2/26/88	27	7.8	7.9	14.8
ELK BUTTE	5550	2/25/88	63	20.3	18.8	33.1	COZY COVE PILLOW	5380	3/01/88	---	10.5	9.2	22.4
ELK BUTTE PILLOW	5550	3/01/88	---	21.4	22.6	37.2	CRAWFORD R.S.	4860	2/27/88	14	4.3	2.6	7.4
FISH LAKE AIRSTRIP	5650	2/25/88	87	28.6	23.6	34.7	DEADMAN GULCH	5600	2/26/88	39	12.3	9.4	15.1
FORTY-NINE MEADOWS	4830	2/25/88	63	19.1	17.1	26.3	DEADWOOD AIRSTRIP	5360	3/01/88	---	8.0E	8.2	14.3
GALENA SUMMIT	8780	2/26/88	40	12.1	9.3	20.2	DEADWOOD SUMMIT	6860	2/26/88	73	26.9	21.6	40.2
GALENA SUMMIT PILLOW	8780	3/01/88	---	11.6	8.6	16.2	DEADWOOD SUM PILLOW	6860	3/01/88	---	26.5	20.0	44.4
GIBBONS PASS	7100	2/26/88	48	15.6	11.6	20.5	DOLLARHIDE SUMMIT	8420	2/25/88	44	13.1	9.3	20.9
HEMLOCK BUTTE	5810	2/25/88	86	27.5	27.0	42.7	DOLLARHIDE SM PILLOW	8420	3/01/88	---	13.4	10.3	21.3
HEMLOCK BUTTE PILLOW	5810	3/01/88	---	26.9	27.8	42.8	GRAHAM GUARD STATION	5690	2/26/88	34	9.9	7.9	14.9
HOODOO BASIN	6050	2/28/88	89	33.0	31.8	43.9	GRAHAM G.S. PILLOW	5690	3/01/88	---	8.8	8.0	16.8
HOODOO CREEK	5900	2/28/88	80	28.9	27.4	40.7	IDAHO CITY TOWNSITE	4000	2/29/88	5	2.1	2.6	4.5
KIT CARSON PASTURE	4950	2/27/88	29	8.4	5.6	7.8	JACKSON PEAK	7070	2/26/88	52	16.2	12.6	26.8
LEATHERMAN PASS	9860	2/27/88	48	14.8	16.2	19.7	JACKSON PEAK PILLOW	7070	3/01/88	---	16.5	13.6	25.4
LEMHI PASS	7480	2/25/88	26	6.3	7.2	7.7	LAKE FORK	5290	2/28/88	31	7.2	13.8	14.3
LEMHI RIDGE	8100	2/25/88	28	7.0	8.2	8.7	LITTLE CAMAS FLAT	4940	2/23/88	10	5.1	4.4	6.2
LOLO PASS	5240	3/02/88	54	18.2	16.8	26.6	MANN CREEK	6080	2/27/88	43	14.1	15.6	21.8
LOLO PASS PILLOW	5240	3/01/88	---	20.3	18.2	28.8	MOORES CREEK SUMMIT	6100	2/29/88	55	19.2	15.5	28.2
LOST LAKE	6110	2/25/88	90	30.1	33.1	48.9	MOORES CK SUM						

# SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85	SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
BIG WOOD, LITTLE WOOD, BIG LOST AND LITTLE LOST BASINS							WATERSHED IV						
BEAR CANYON	7900	2/25/88	35	9.4	6.6	15.4	PACKSADDLE SPRING	8200	2/29/88	54	19.7	14.8	24.7
BEAR CANYON PILLOW	7900	3/01/88	---	9.1	5.5	13.9	PEBBLE CREEK	6550	2/27/88	32	9.1	7.8	14.4
BENNETT MOUNTAIN	6560	2/23/88	34	9.9E	7.8	15.2	PHILLIPS BENCH	8200	2/25/88	62	19.7	18.9	25.5
BENNETT MTN PILLOW	6560	3/01/88	---	8.4	9.2	16.4	PHILLIPS BENCH PILL.	8200	3/01/88	---	17.6	15.9	23.7
CAMAS CREEK DIVIDE	5710	2/25/88	18	6.9	5.8	10.6	PINE CREEK PASS	6810	2/29/88	40	13.2	9.0	15.4
CHIMNEY CREEK	6400	2/25/88	28	8.0	7.4	13.9	PUTNAM	7220	2/27/88	38	8.5	10.8	18.5
COPPER BASIN	7640	2/25/88	15	3.9	2.4	8.1	SAWTELL MOUNTAIN	8720	3/01/88	62	22.7	16.0	28.8
COUCH SUMMIT	6840	2/25/88	34	8.1	6.4	16.7	SEDEGWICK PEAK	7850	2/27/88	34	10.4	8.6	16.0
DOLLARHIDE SUMMIT	8420	2/25/88	44	13.1	9.3	20.9	SHEEP MOUNTAIN	6570	2/29/88	28	8.4	7.2	12.0
DOLLARHIDE SM PILLOW	8420	3/01/88	---	13.4	10.3	21.3	SHEEP MTN PILLOW	6570	3/01/88	---	9.2	7.9	13.8
DRY FORK	7220	2/24/88	30	8.0	5.1	14.4	SLUG CREEK DIVIDE	7230	2/26/88	33	9.8	7.8	14.7
FISHPOLE LAKE	9300	2/25/88	39	12.3	7.3	17.0	SLUG CK DVD PILLOW	7230	3/01/88	---	10.9	8.6	16.7
GALENA	7440	3/01/88	---	8.8E	7.3	16.6	SOMSEN RANCH	6840	2/24/88	34	9.7	8.3	12.9
GALENA PILLOW	7440	3/01/88	---	10.1	7.8	16.4	SOMSEN RANCH PILLOW	6800	3/01/88	---	7.6	7.3	12.4
GALENA NEW	7470	2/26/88	36	9.5	7.7	18.3	STATE LINE	6660	2/29/88	37	11.1	8.9	12.7
GALENA SUMMIT	8780	2/26/88	40	12.1	9.3	20.2	SULPHUR PEAK	7070	2/24/88	34	10.1	8.2	14.2
GALENA SUMMIT PILLOW	8780	3/01/88	---	11.6	8.6	16.2	TARGHEE PASS	6980	3/01/88	---	8.5E	7.3	12.9
GARFIELD R.S.	6560	2/29/88	16	4.9	3.2	9.9	TETON PASS W.S.	7740	2/25/88	53	17.0	17.9	22.4
GARFIELD R.S. PILLOW	6560	3/01/88	---	5.5	3.5	9.9	TEX CREEK	6650	3/01/88	---	6.1E	5.3	8.6
GRAHAM RANCH	6270	2/26/88	26	5.7	5.1	12.6	TOPONCE	6160	2/27/88	34	11.6	7.4	14.6
HILTS CREEK	8000	2/26/88	29	6.6	5.7	9.4	TWITCHELL CANYON	6300	3/01/88	34	11.2	10.7	14.4
HILTS CREEK PILLOW	8000	3/01/88	---	9.7	5.8	11.3	VALLEY VIEW	6680	3/01/88	30	9.4	8.0	14.8
HYNDMAN CREEK	7440	2/25/88	30	7.7	5.3	12.7	WEBBER CREEK	6700	2/25/88	18	3.8	3.2	4.8
HYNDMAN PILLOW	7440	3/01/88	---	8.3	4.8	11.4	WHISKEY CREEK	6800	2/26/88	48	11.6	10.4	17.7
IRON BOG	7650	2/24/88	29	7.3	4.5	12.4	WHITE ELEPHANT	7710	3/01/88	48	15.9	10.5	21.5
IRON MINE CREEK	6300	2/29/88	18	5.0	4.8	10.1	WHITE ELEPHANT PILL	7710	3/01/88	---	17.2	12.5	22.6
LEADBELT	6700	2/24/88	17	3.8	4.4	8.5	WILDHORSE DIVIDE	6490	2/27/88	31	9.1	9.5	15.0
LEATHERMAN PASS	9860	2/27/88	48	14.8	16.2	19.7	WILDHORSE DVD PILLOW	6490	3/01/88	---	9.0	8.9	14.2
LITTLE CAMAS FLAT	4940	2/23/88	10	5.1	4.4	6.2	WOOD CANYON DIVIDE	7450	2/24/88	36	10.3	8.9	16.4
LOST-WOOD DIVIDE	7900	2/25/88	45	13.4	8.2	19.8							
LOST-WOOD DVD PILLOW	7900	3/01/88	---	12.6	8.1	20.5							
MASCOT MINE	7780	2/25/88	26	6.2	4.1	12.9	SOUTHSIDE SNAKE BASIN						
MOONSHINE	7440	2/25/88	29	6.6	4.2	9.0	WATERSHED VI						
MOONSHINE PILLOW	7440	3/01/88	---	7.4	5.3	9.4	ANTELOPE RIDGE	6180	2/28/88	9	3.3	4.4	6.8
MOUNT BALDY	8920	2/25/88	38	10.7	10.2	18.1	BADGER GULCH	6660	2/23/88	28	7.8	6.0	11.3
MULDOON	6320	2/29/88	13	3.7	3.2	7.4	BATTLE CREEK	5720	3/07/88	1	.1	2.2	3.4
SAWMILL CANYON	7000	2/25/88	26	5.2	3.8	7.0	BEAR CREEK	7800	2/25/88	44	13.2	10.7	18.2
SOLDIER R.S.	5740	2/25/88	22	6.2	4.3	11.6	BEAR CK SNOTEL	7800	3/01/88	---	13.0S	8.9	18.1
SOLDIER R.S. PILLOW	4330	3/01/88	---	6.3	4.6	---	BIG BEND	6700	2/23/88	26	7.2	4.2	8.0
STICKNEY MILL	7430	2/25/88	19	3.9	3.7	8.2	BOSTETTER R.S.	7500	2/23/88	43	12.6	8.8	17.8
STICKNEY MILL PILLOW	7430	3/01/88	---	3.2	3.4	7.5	BOSTETTER RS PILLOW	7500	3/01/88	---	9.8	7.9	16.0
SWEDE PEAK	7640	2/29/88	31	8.3	5.9	15.2	BOY SCOUT CAMP	7740	2/23/88	32	10.4	9.8	13.4
SWEDE PEAK PILLOW	7640	3/01/88	---	8.3	4.7	13.4	BULL BASIN	5460	3/07/88	0	.0	.8	1.2
TELFER RANCH	5840	2/29/88	11	3.6	3.4	7.9	CEDAR CREEK	6820	2/25/88	24	6.8	5.1	9.4
VIENNA MINE	8960	2/26/88	60	19.9	15.0	31.2	CLEAR CREEK MEADOWS	9420	2/23/88	48	13.6	13.8	19.3
VIENNA MINE PILLOW	8960	3/01/88	---	20.2	14.7	31.1	COLUMBIA BASIN	6650	2/22/88	21	5.9	7.1	8.4
WET CREEK SUMMIT	7680	2/26/88	30	8.7	4.5	10.0	DEADLINE	7400	2/25/88	28	9.5	10.9	19.1
							DEADLINE SOUTH	7450	2/25/88	35	11.9	16.8	21.1
							FOX CREEK	6800	2/25/88	30	8.4	6.4	9.9
							FRY CANYON	6700	2/25/88	---	6.6E	4.9	6.7
							GEORGE CREEK	8840	2/23/88	42	12.2	12.4	18.1
							GOAT CREEK	8800	2/25/88	40	11.5	8.1	16.0
							GOLD CREEK	6600	2/23/88	18	4.4	2.5	5.2
							HOWELL CANYON	7980	2/23/88	50	16.6	14.6	22.9
							HOWELL CANYON PILLOW	7980	3/01/88	---	13.3	11.1	19.0
							HUMMINGBIRD SPRINGS	8950	2/25/88	52	15.6	12.2	20.2
							HYDE PASTURE	5760	3/07/88	1	.1	3.5	5.4
							INDIAN GROVE	7560	2/23/88	23	5.6	5.8	11.1
							JACK CREEK, LOWER	6800	2/24/88	20	5.4	4.1	4.6
							JACKS PEAK	8420	3/01/88	---	16.3E	11.8	20.3
							JOHNSTON POND	6700	3/07/88	.12	4.0	---	---
							LANGFORD FLAT CREEK	5980	2/25/88	18	5.8	3.1	5.8
							LAUREL DRAW	6700	3/01/88	---	6.3E	6.5	7.7
							LOGGER SPRINGS	8120	2/23/88	40	11.0	10.2	16.5
							LOOKOUT BUTTE	5650	3/07/88	0	.0	.2	.3
							LOUSE CANYON	6440	3/07/88	0	.0	3.7	4.8
							MAGIC MOUNTAIN	6880	2/25/88	38	11.8	10.4	16.9
							MAGIC MTN PILLOW	6880	3/01/88	---	11.5	9.5	16.9
							MERRIT MOUNTAIN	7000	2/22/88	13	3.4	3.8	5.2
							MUD FLAT	5730	2/28/88	12	4.2	6.4	6.1
							MUD FLAT PILLOW	5730	3/01/88	---	3.6	4.8	5.8
							ONE MILE SUMMIT	7330	2/23/88	12	3.0	3.1	6.0
							OREGON CANYON	6950	3/07/88	1	.1	3.8	5.2
							POLE CREEK R.S.	8330	2/25/88	46	14.6	10.8	17.4
							QUINN RIDGE	6300	3/07/88	0	.0	2.0	1.7
							RED CANYON	6650	3/07/88	11	3.8	5.0	6.4
							RODEO FLAT	6800	2/23/88	---	5.4E	5.5	5.9
							SEVENTYSIX CREEK	7100	3/01/88	---	7.2E	6.5	11.3
							SEVENTYSIX CK SNOTEL	7100	3/01/88	---	5.4S	5.9	9.5
							SHOSHONE BASIN	5810	3/01/88	---	5.6E	3.4	5.5
							SILVER CITY	6400	2/29/88	32	10.7	10.2	14.1
							SOUTH MOUNTAIN	6500	2/29/88	28	10.2	9.8	12.6
							SOUTH MTN PILLOW	6500	3/01/88	---	10.7	10.2	12.2
							SUBLETT	5950	2/23/88	27	6.5	5.2	10.5
							SUCCOR CREEK	6100	3/07/88	11	3.8	4.5	6.3
							TAYLOR CANYON	6200	2/24/88	17	4.2	2.9	5.0
							TOE JAM	7700	2/22/88	28	7.8	7.7	9.2
							VAUGHT RANCH	5830	3/07/88	1	.1	2.7	4.1
							VIPONT	7670	2/23/88	29	8.1	7.4	13.4
							WAR EAGLE	7280	3/07/88	12	4.1	14.5	20.2
							WILSON CREEK	7500	2/25/88	30			



# SNOW DATA MEASUREMENTS (cont.)

SNOW COURSE	ELEVATION	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 1961-85
GREAT BASIN			WATERSHED VII			
CLIFF CANYON	7200	2/26/88	12	3.3	2.9	8.7
CUB RIVER R.S.	5450	2/26/88	23	6.3	4.7	8.6
DANIELS CREEK	6270	2/26/88	17	4.0	3.1	5.9
DRY BASIN	7820	2/26/88	46	15.9	13.7	24.9
DRY CREEK FLAT	6360	2/26/88	19	5.9	2.8	7.9
EMIGRANT SUMMIT	7390	2/29/88	43	14.6	11.5	21.9
EMIGRANT SUM PILLOW	7390	3/01/88	---	12.6	11.4	25.3
EMIGRATION CANYON	6500	2/29/88	27	7.7	5.9	9.9
FRANKLIN BASIN	8020	2/26/88	43	13.8	12.0	21.7
FRANKLIN BSN PILLOW	8040	2/26/88	49	15.3	14.7	26.3
GIVEOUT	6860	2/29/88	33	9.4	6.2	11.0
GIVEOUT PILLOW	6840	3/01/88	---	9.8	5.0	11.8
GIVEOUT NEW	6930	2/29/88	32	9.2	4.8	9.9
LIBERTY SPRING	8600	2/26/88	64	22.3	18.1	33.2
LITTLE BEAVER	6790	2/29/88	37	10.8	7.4	13.8
LOWER ELKHORN	6960	2/26/88	25	6.6	5.8	13.1
LOWER HOME CANYON	7640	2/26/88	31	8.9	6.3	12.0
MONTPELIER CREEK	6540	3/01/88	---	6.2E	3.6	7.7
OXFORD MOUNTAIN	6800	2/26/88	19	6.1	4.2	9.7
OXFORD SPRING	6740	2/26/88	22	6.1	3.6	10.8
OXFORD SPRING PILLOW	6740	2/26/88	22	6.1	3.7	12.7
STRAWBERRY CREEK	5820	2/29/88	25	7.4	5.1	10.2
STRAWBERRY-MINK DVD	6720	2/26/88	42	14.2	8.8	19.0
UPPER ELKHORN	7140	2/26/88	33	9.6	7.4	16.4
UPPER HOME CANYON	8560	2/26/88	45	13.6	11.8	20.4
WILLOW FLAT	6070	2/26/88	36	10.5	8.2	14.3
WORM CREEK	6620	2/26/88	36	10.6	9.1	17.0

## **WATER CONSERVATION TIPS:**

Snow surveys taken near March 1 indicate that below to well below normal flows will occur on many streams across central and southern Idaho. Study this Water Supply Outlook Report carefully for streamflow and reservoir storage figures that concern your area.

Keep in touch with your irrigation district, reservoir manager, or others who monitor and regulate water supplies for estimates of the supply available to you. You may find you'll need to change crops, reduce planted acres, adjust tillage operations, or manage your livestock differently to conserve a short water supply.

Here are some water conservation tips to help make the best use of limited water supplies:

### **FARMERS**

The type of crops you plant may need to be adjusted. Find out whether you will have a little water all season, or more in the spring and none later on. Vary crops accordingly. For example, alfalfa, corn and sugar beets need water all season. Wheat and barley need water early in the season.

Don't plant too early. Be sure the soil is warm enough for rapid and complete seed germination.

Consider using chemicals rather than tillage to control water-using weeds.

If you decide to plant fewer acres, plant drought tolerant cover crops on unplanted fields to protect against wind erosion.

### **IRRIGATORS**

Know your soil type. This is your guide to rate and frequency of irrigation. Know precisely how fast your soil can accept water and its total water holding capacity. This will help you decide how much water to apply at a given time.

If you have a conservation plan for your farm, or if the soil in your area has been mapped, the Soil Conservation Service can cross-check soil type and irrigation data and provide you with the water holding capacity of your soil.

Check your irrigation system carefully. Make certain ditches are cleared of water wasting weeds or debris that slow delivery. Check sprinkler heads and nozzles for wear and leaks, pipes for tight connections, and valves for leaks.

Consider ditch lining or gated pipe. This will reduce the 10-90 percent loss which occurs in earth ditches.

#### DRYLAND FARMERS

Valley precipitation totals are below normal across Idaho: Soil moisture levels are below normal and good spring precipitation will be needed to bring moisture up to normal.

A conservation tillage system is your best protection. Leaving residue from the previous crop on the soil surface will retard runoff, increase absorption and percolation, and reduce evaporation.

Keep necessary tillage shallow. Delay spring tillage until absolutely essential to help conserve soil moisture.

Don't use turn plows or one-way discs. Use sweeps for the first necessary operation. Over-tillage will destroy residue and dry out the soil.

Use chemicals for weed control whenever possible.

#### RANCHERS

Consider adjusting livestock numbers to balance with the forage supply. Cull herds more than normal; sell calves and lambs early.

Determine forage needs and plan to buy needed supplements early.

Grow small grain for use as hay or pasture; it requires less water than conventional forage. Defer planting pasture, hay or range forage until a more favorable water year.

Check with the Soil Conservation Service and your local soil conservation district for details concerning your soil and water conservation problems. The next water supply forecast will be issued about April 1, 1988.



# The Following Organizations Cooperate With The Soil Conservation Service In Snow Survey Work

## State

Idaho Department of Water Resources  
Soil and Water Conservation Districts of Idaho

## Federal

U.S. Department of Agriculture  
Forest Service  
U.S. Department of Army  
Corps of Engineers  
U.S. Department of Commerce  
NOAA, National Weather Service  
U.S. Department of Interior  
Bureau of Reclamation  
Geological Survey, Water Resources Division  
Shoshone-Bannock Tribal Council

## Local

Big Lost River Irrigation District  
Big Wood Irrigation Company  
Boise Project Board of Control  
Idaho Water District #01  
Lewiston Orchards Irrigation District  
Little Wood River Irrigation District  
North Board of Control — Owyhee Project  
Salmon Falls Irrigation Company  
South Board of Control — Owyhee Project

## Private

Cyprus Mining Company  
FMC Corporation  
Idaho Power Company  
Le Bois Resort  
Washington Water Power Company

Other organizations and individuals furnish information for the snow survey reports. Their cooperation is gratefully acknowledged.

UNITED STATES DEPARTMENT OF AGRICULTURE  
SOIL CONSERVATION SERVICE  
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**Idaho  
Water Supply Outlook**

and

Federal — State — Private  
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SOIL CONSERVATION SERVICE